



Simply Better Connections

Command Line Interface (CLI) Guide

ATEN Control System

About This Guide

ATEN Control System adopts Telnet protocol to implement CLI for users to send commands. This guide applies to ATEN controllers and extension boxes. These commands allow you to configure Telnet settings, I/O settings, sending control commands to controller/extension box managed devices, and receiving device responses.

Note: I/O settings made via CLI will be lost if a viewer is uploaded through the ATEN Configurator (GUI) afterwards. To look up the current control mode of a controller, visit the web console.

Reboot

Usage:

Reboot the controller.

Syntax:

reboot\n

Acknowledge:

Command OK\n : Command is correct and the function is executed.

Command incorrect\n : Command and/or parameters are incorrect and not executed.

Example:

reboot\n : reboot device

Help

Usage:

Display the instruction for enabling the CLI mode of the controller.

Syntax:

help\n

Acknowledge:

Command OK\n : Command is correct and the function is executed.

Command incorrect\n : Command and/or parameters are incorrect and not executed.

Example:

help\n : display instruction of CLI mode

Echo

Usage:

Enable or disable the controller to automatically response to received messages.

Syntax:

echo[control]\n

Parameter:

control : on - enable this function

off - disable this function (default is off)

Acknowledge:

Command OK\n : Command is correct and the function is executed.

Command incorrect\n : Command and/or parameters are incorrect and not executed.

Example:

echo on\n : set the controller to automatically respond to received messages.

Telnet

Usage:

Configure Telnet CLI mode settings.

Syntax:

telnet[timeout interval][login control]↙

Keyword:

timeout : Telnet session timeout interval setting

login : Telnet login function setting

Parameter:

interval : session timeout in minute. (0 means never timeout)(default is 5)

control : on – enable login function (default is on)

off – disable login function

Acknowledge:

Command OK↙ : Command is correct and the function is executed.

Command incorrect↙ : Command and/or parameters are incorrect and not executed.

Example:

telnet timeout 0↙ : configure the timeout interval to never timeout

telnet timeout 5↙ : configure the timeout interval to 5 minutes

telnet login off↙ : disable the login function

Serial

Usage:

Control and configure serial port settings.

Syntax:

```
serial [p sequence] [type stype] [baud baudrate] [dbit databit] [parity sparsity] [sbit stopbit]  
[fctrl flowctrl] [dtype datatype] [endchar chars] [checksumtype checksumtype] [acktimeout  
duration] [control "data"] [help] ↴
```

Keyword:

p : port
type: serial type
baud : baud rate
dbit : data bit
parity : serial parity
sbit : stop bit
fctrl : flow control
dtype : data type
acktimeout : timeout duration (ms) is used for waiting for the feedback from sendack control.
endchar : specific end character is used to identify a complete message.
checksumtype : if need fw to auto-calculate command checksum, assign a checksum type
help: show instructions

Parameter:

sequence : port, separated by comma for multiple ports
* (all ports)
stype: 232, 422, 485 (default 232)
baudrate : 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 (default 9600)
databit : 7, 8 (default 8)
sparsity : none, even, odd (default none)
stopbit : 1, 2 (default 1)
flowctrl : none, hw (default none)
datatype : ascii, hex (default ascii)
checksumtype: none, modbus (default none)
duration : specific timeout (ms)(default 300)
chars : end characters following a complete message.
control : read - display received message of the specific serial port
write - send data from the serial port. Use " symbol covers data. Use \x symbol to send
Hex code
sendack - send data from the serial port and display received message

Acknowledge:

Command OK ↴ : Command is correct and the function is executed.

Command incorrect ↴ : Command and/or parameters are incorrect and not executed.

Example:

Serial help ↴ : show instructions

serial p01 ↴ : display the setting information of serial port1.

serial p* ↴ : display the setting information of all serial ports.

serial p01 type 232 baud 115200 dbit 8 parity none sbit 1 fctrl none ↴ : configure port1.

serial p01,04,07 baud 19200 ↴ : configure port1, 4, 7 to baud rate 19200.

serial p02 baud 19200 ↴ : configure port2 to baud 19200 and use default settings for other parameters.

serial p02 dtype hex read ↴ : display the received message of port2 in HEX format.

serial p03 write "sw i01 o02\r\n" ↴ : send the ASCII text 'sw i01 o02' from port3.

serial p03 sendack "sw i01 o02\x0D\x0A" ↴ : send the ASCII text 'sw i01 o02' from port3 and display the feedback.

Relay

Usage:

Control and configure relay ports.

Syntax:

relay [p sequence] [tpulse duration] [control] [help] ↵

Keyword:

p :	port
tpulse :	closed period for pulse
help:	show instructions

Parameter:

sequence :	port, separated by comma for multiple ports * (all ports)
duration :	time period in millisecond.
control :	open - turn off close - turn on pulse - close the relay channel then open toggle - relay toggle read - display status

Acknowledge:

Command OK ↵ : Command is correct and the function is executed.

Command incorrect ↵ : Command and/or parameters are incorrect and not executed.

Example:

relay help ↵ : show instructions
relay p01 close ↵ : close port1 channel.
relay p01 open ↵ : open port1 channel.
relay p01,04,07 close ↵ : close port 1, 4, 7 relay channels.
relay p02 tpulse 500 pulse ↵ : close port2 500ms then open.
relay p02 read ↵ : display port2 status.

I/O

Usage:

Control and configure I/O ports.

Syntax:

io [p sequence] [type iotype] [lthresh threshold] [hthresh threshold] [tpulse duration] [control] [help] ↵

Keyword:

p :	port
lthresh :	low-bound threshold
hthresh :	high-bound threshold
tpulse :	period which I/O remains in high level in pulse mode
help:	show instructions

NOTE: If a parameter is not specified, a previously entered value will be applied.

Parameter:

sequence :	port, separated by comma for multiple ports * (all ports)
iotype :	dry, vdc, dout
threshold :	trigger threshold in voltage
duration :	time period in millisecond.
control :	open close pulse toggle read

Acknowledge:

Command OK ↵ : Command is correct and the function is executed.

Command incorrect ↵ : Command and/or parameters are incorrect and not executed.

Example:

```
io help ↵ : show instructions
io p01 ↵ : display the setting information of I/O port1.
io p* ↵ : display the setting information of all I/O ports.
io p01 type dry ↵ : configure port 1 to dry contact mode.
io p01 type dout ↵ : configure port 1 to digital output mode.
io p01 type vdc lthresh 1 hthresh 3 ↵ : configure port 1 to vdc mode with threshold settings.
io p01 open ↵ : open port1 channel.
io p01 close ↵ : close port1 channel.
io p01,04,07 close ↵ : close port1,4,7 channels.
io p02 tpulse 500 pulse ↵ : close port2 channel 500ms then open.
io p02 read ↵ : display port2 status.
```

IR

Usage:

Control and configure IR ports.

Syntax:

```
ir [p sequence] [type irtype] | [baud baudrate] [dbit databit] [parity sparsity]
    [sbit stopbit] [dtype datatype] [checksumtype checksumtype] [control "data"]
    [help] ↵
```

Keyword:

p :	port
type :	output type for specific output port
baud** :	baud rate
dbit** :	data bit
parity** :	serial parity
sbit** :	stop bit
dtype** :	data type
checksumtype** : Controller/extension box automatically calculates the specified checksum type	
help:	show instructions

NOTE:

* : This keyword is for IR type

** : These keywords are for 232 type

If a parameter is not specified, a previously entered value will be applied.

Parameter:

sequence :	port, separated by comma for multiple ports * (all ports)
irtype:	ir, 232(default ir)
baudrate :	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200(default 9600)
databit :	7, 8(default 8)
sparsity :	none, even, odd(default none)
stopbit :	1, 2(default 1)
datatype :	ascii, hex(default ascii)
checksumtype:	none, modbus(default none)
control :	write - send IR code or RS232 data

Acknowledge:

Command OK ↵ : Command is correct and the function is executed.

Command incorrect ↵ : Command and/or parameters are incorrect and not executed.

Example:

```
ir help ↵ : show instructions  
ir p01 ↵ : display the setting information of IR port1.  
ir p* ↵ : display the setting information of all IR ports.  
ir p01,04,07 type 232 ↵ : configure port1,4,7 to RS232 type  
ir p01 type 232 baud 115200 dbit 8 parity none sbit 1 checksum type modbus ↵ :  
    configure port1 to RS232 type and the settings  
ir p02 write dtype hex "0a0b0c" ↵ : send hex format data 0a0b0c from port2  
ir p02 baud 19200 ↵ : configure port2 to baud 19200 and use the default settings for other parameters.  
ir p02 write "sw i01 o02\r\n" ↵ : send the ASCII text 'sw i01 o02' from port2.  
ir p02 write "sw i01 o02\x0D\x0A" ↵ : send the ASCII text 'sw i01 o02' from port2.
```